

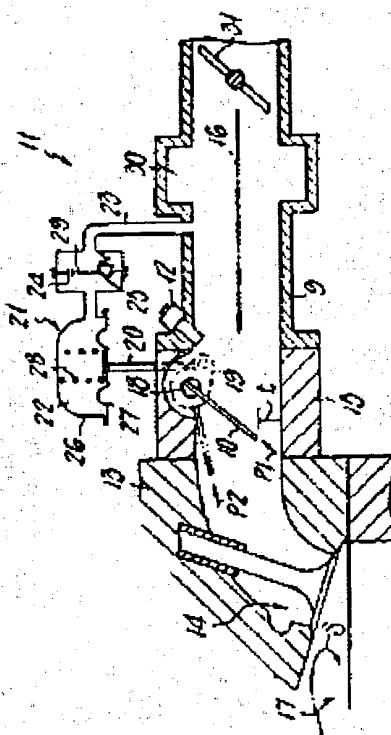
## VARIABLE SWIRL GENERATING DEVICE

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**Applicant:** MITSUBISHI MOTORS CORP  
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### Abstract of JP63032122

**PURPOSE:** To improve the acceleration responsiveness by installing a swirl generating valve on the downstream side of a fuel injection valve in a suction passage and controlling the swirl generation valve so that the flow passage area is reduced when the load is small and delaying the operation for increasing the flow passage area when the load sharply increases.

**CONSTITUTION:** A shutter valve 10 as a variable swirl generating valve which turns around a shaft 18 is installed onto the downstream side of a fuel injection valve 12 on the upstream side of an intake port 14. The shutter valve 10 is connected with the diaphragm 27 of a vacuum motor 21 through a link 19, and opened and closed by the negative pressure of an intake manifold 9. A valve opening delaying means consisting of an orifice 24 and a check valve 25 is installed into a negative pressure pipe 23. Therefore, when a throttle valve is opened in engine acceleration, the reduction of the negative pressure is transmitted to a vacuum motor 21, and the fuel adhering onto the suction pipe is splashed off by throttling the intake stream in the initial stage of acceleration, and the lean conversion in acceleration is prevented, and the acceleration responsiveness can be improved.



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